

UTAH COUNTY JOB DESCRIPTION

CLASS TITLE: ENGINEERING TECHNICIAN I / II
SENIOR ENGINEERING TECHNICIAN

CLASS CODE: ENGINEERING TECHNICIAN I - 7005
ENGINEERING TECHNICIAN II - 3043
SENIOR ENGINEERING TECHNICIAN - 3046

EFFECTIVE DATE: Amended 06/05/07 (Revised 03/19/02 version)

MARKET POINT: Based on applicable market study

DEPARTMENT: Public Works

JOB SUMMARY

Under direction, performs various duties in supporting, inspecting, and managing County roads and other public works projects.

CLASS CHARACTERISTICS

Engineering Technician I: This is the entry engineering technician classification level relating to County development projects, roads and signs.

Engineering Technician II: This is the primary engineering technician classification level relating to County development projects.

Senior Engineering Technician: This is the supervisory classification level relating to County construction administration activities.

ENGINEERING TECHNICIAN I - ESSENTIAL FUNCTIONS

Repairs, replaces, and creates new County signs as needed.

Assists in performing inventory and inspections of County roads, bridges, signs, and County properties.

Orders signage supplies and materials as needed.

Assists in the forming and pouring of concrete footings, slabs, and walls.

Assists in the framing and erecting of small structures.

Assists in performing inspections for excavation and access permits.

Assists in snow removal and maintaining flood channels and debris basins including cleanup, monitoring for unsafe conditions, and adjusting discharge rates.

Assists in the inspection of subdivisions to ensure conformance to plans and adherence to County development standards.

Assists in the management and site inspection of construction projects within the Engineering Division.

Supervises and coordinates projects with contractors and developers.

Inspects County projects including chip sealing, drainage, road maintenance, safety, signing, and road and bridge construction.

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Collects data on County projects.

Inspects quality control efforts on County construction projects.

ENGINEERING TECHNICIAN II - ESSENTIAL FUNCTIONS

In addition to the functions described above:

Designs and creates construction and as-built drawings for County projects.

Designs office space for remodeling projects in County buildings.

Assists in the management and inspection of projects (both Utah County projects and private contractor projects) throughout Utah County.

Conducts bridge assessments with the State Bridge Inspectors and resolves identified concerns.

Assists in railroad crossing inspections and assessments to ensure inspection emphasizes safety and liability considerations.

Performs traffic counts.

Assists with civil and surveying design using the CAD computer system.

Assists with field activities on County projects.

Maintains assessment files, project diaries, and various reports.

SENIOR ENGINEERING TECHNICIAN - ESSENTIAL FUNCTIONS

In addition to the functions described above:

Supervises field operations of assigned employees and contractors in completing County projects related to roads, bridges, signing, small structures, park facilities, parking lots, and similar Public Works facilities.

Supervises, trains, and assists assigned personnel in their respective duties related to County projects.

Inspects County projects to ensure quality and compliance with plans, specifications, construction codes, building codes, pertinent legislation, and County standards.

Prioritizes and sets schedules for County roads maintenance and repairs.

Serves as liaison between Utah County, cities, and federal agencies regarding road maintenance.

Participates in the construction of projects including but not limited to framing, forming, and pouring and finishing of concrete.

Responds to emergency situations on an on-call basis as assigned.

Responds to complaints related to County projects.

Performs civil and surveying design using the CAD computer system.

Assists in the safety review of County projects..

Ensures that inspection records are properly maintained.

Inspects excavation and access permits to ensure conformance with safety and construction standards.

Assists in accident investigations and maintains a computerized accident database.

Serves as the County's storm water representative.

Performs the County's storm water requirements as per inter local agreements.

Manages County's debris basin facilities.

Acts a Dam Tender for all County maintained debris basins.

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ENGINEERING TECHNICIAN I - KNOWLEDGE, SKILLS, AND ABILITIES

Ability to maintain cooperative relationships with those contacted in the course of work activities; Skill in reading, writing, and basic math; Knowledge of the principles and practices of traffic control, signage, and pavement marking; Skill in pouring and forming concrete; Knowledge of access permit requirements; Skill in the use of power equipment and hand tools; Ability to respond quickly and effectively in emergency situations; Skill in operating and maintaining field engineering equipment; Ability to read and interpret standard construction plans and maps; Ability to communicate effectively verbally and in writing; Ability to follow written and oral instructions; Knowledge of County development standards; and Skill in directing the work of others.

ENGINEERING TECHNICIAN II - KNOWLEDGE, SKILLS, AND ABILITIES

In addition to the knowledge, skills, and abilities described above:

Skill in document composition; Ability to maintain files, records, and reports; Ability to coordinate multiple tasks effectively; Skill in interpersonal communication; Knowledge of computer programs including Computer Aided Drafting; Skill in algebra, trigonometry, geometry, surveying, advanced math, and applied engineering calculations; Skill in analytical problem solving; and Knowledge of surveying and engineering principles and construction practices.

SENIOR ENGINEERING TECHNICIAN - KNOWLEDGE, SKILLS, AND ABILITIES

In addition to the knowledge, skills, and abilities described above:

Ability to communicate technical information verbally and in writing; Knowledge of local codes, requirements, and safety rules; Knowledge of technical manuals including the Standard Specifications for Construction and the Manual for Uniform Traffic Control Devices; and Knowledge of supervisory techniques.

PHYSICAL DEMANDS

Regularly walk, stand, or stoop; Regularly lift, carry, push, pull or otherwise move objects weighing up to 100 pounds; Ascend or descend ladders, scaffolding, ramps, poles, and the like; Use tools or equipment requiring a high degree of dexterity; Regularly drives a motor vehicle; Work for sustained periods of time maintaining concentrated attention to detail; Need to distinguish between shades of color; and Communicate via radios.

Accommodation may be made for some of these physical demands for otherwise qualified individuals who require and request such accommodation.

WORKING CONDITIONS

Work is performed in an office with a computer and occasionally outdoors in hot, cold, or inclement weather; Work is performed occasionally in a partially environmentally controlled building; Work exposes incumbent to conditions such as fumes, noxious odors, dusts, mists, gases, and poor ventilation; Work exposes incumbent to possible bodily injury from moving mechanical parts of equipment, tools, or machinery; Work requires use of protective devices such as masks, goggles, and gloves; and Work exposes incumbent to possible bodily injury when performing field work.

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EDUCATION AND EXPERIENCE

Engineering Technician I - Equivalent to a high school diploma; and three (3) years work experience performing civil engineering activities.

Engineering Technician II - Equivalent to an Associate's Degree in Civil Engineering, Drafting Technology or Surveying; and two (2) years work experience performing civil engineering activities.

Senior Engineering Technician - Equivalent to an Associate's Degree in Civil Engineering, Drafting Technology including course work in surveying, advanced structural drafting, advanced architectural drafting and civil drafting, or related field including course work in math, soils, surveying, engineering principles, and construction; and four (4) years work experience performing civil engineering activities including two (2) years in a leadership capacity.

LICENSING AND CERTIFICATION

Engineering Technician I / II and Senior Engineering Technician - Incumbent must possess a valid State of Utah drivers license.

This description lists the major duties and requirements of the job and is not all-inclusive. Incumbent(s) may be expected to perform job-related duties other than those contained in this document and may be required to have specific job-related knowledge and skills.